

COMMONWEALTH OF MASSACHUSETTS  
CITY OF LOWELL

In City Council

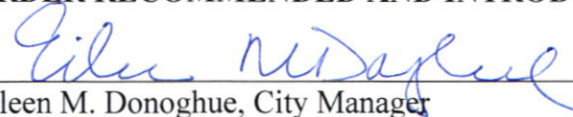
LOAN ORDER – WASTEWATER ENTERPRISE CAPITAL IMPROVEMENTS

To borrow \$67,000,000 for the purpose of financing various wastewater enterprise capital improvements and purchases and any related architectural and engineering services in connection therewith and any costs incidental and related thereto.

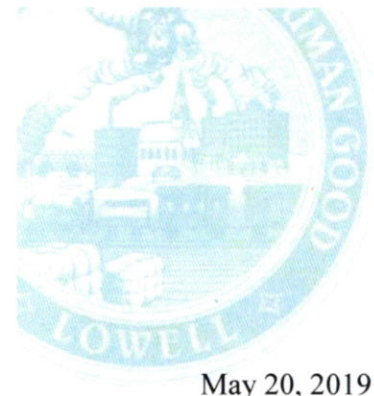
IT IS ORDERED BY THE CITY COUNCIL OF THE CITY OF LOWELL BY A TWO-THIRDS VOTE OF ALL OF ITS MEMBERS, as follows:

**Ordered:** That the sum of \$67,000,000 is appropriated for the purpose of financing the following wastewater system capital improvements, and any related architectural and engineering services in connection therewith and any costs incidental and related thereto: (1) construction of a wet weather storage facility (Pevey/Broadway and Douglas Road), (2) construction of sewer separation and green infrastructure facilities (Decatur East/North Common), (3) conveyance/siphon upgrades (Beaver Brook Station), (4) construction of a wet weather storage facility (Walker Station), (5) construction of a wet weather storage facility (North Bank), (6) construction of remote station upgrades (various pump stations), (7) construction of wastewater facility upgrades (Duck Island), and (8) permitting, planning, design and construction services (legal and engineering); that to meet this appropriation the Treasurer, with the approval of the City Manager, is authorized to borrow \$67,000,000 and to issue bonds or notes therefor under G.L. c.44 or any other enabling authority; that the City Manager is authorized to contract for and expend any federal or state aid available for the projects; that the City Manager is authorized to take any action necessary to carry out the projects; and that the Treasurer is authorized to file an application with the Municipal Finance Oversight Board to qualify any or all of the bonds under G.L. c.44A and to provide such information and execute such documents as such board may require for these purposes. Any premium received upon the sale of any bonds or notes approved by this loan order, or upon the sale of any other bonds or notes approved by any other loan order of the City adopted prior to the date of this loan order, less any such premium applied to the payment of the costs of issuance of such bonds or notes, may be applied to the payment of costs approved by this vote in accordance with G.L. c. 44, §20, thereby reducing the amount authorized to be borrowed to pay such costs by a like amount.

**ORDER RECOMMENDED AND INTRODUCED BY:**

  
Eileen M. Donoghue, City Manager

V: loan order – Wastewater – 67mil



Eileen M. Donoghue  
*City Manager*

May 20, 2019

Mayor William J. Samaras  
And  
Members of the Lowell City Council

Dear Mayor Samaras and Members of the Lowell City Council,

In December, the City of Lowell will submit an integrated plan ('IP') for capital improvements to the Environmental Protection Agency ('EPA'). The IP is part of a negotiated agreement between the EPA and the City of Lowell that requires the city to develop a long-term control plan ('LTCP') for Combined Sewer Overflow (CSO). Enclosed is a loan order which will provide funding over the next ten (10) years to finance the projects contained in the aforementioned plan.

The IP will include capital improvements for all of Lowell's water transport systems, including improvement to the drinking water, storm water, and wastewater systems. This integrated approach to address all of Lowell's water system needs has the advantage of allowing the city to address all of Lowell's water system improvements, along with CSO control projects and other necessary water related upgrades.

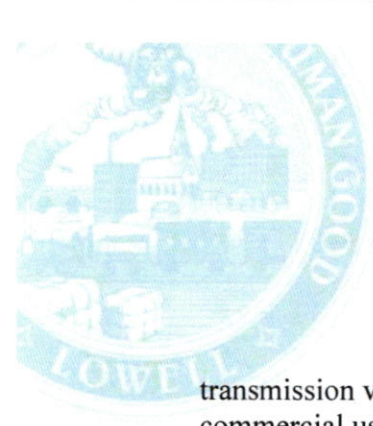
While the city recognizes the importance of investing in CSO control, Lowell's drinking water system vulnerabilities represent a serious concern with regards to the city's sustaining ability to provide safe and reliable drinking water to its residents. The IP process is an opportunity to construct the needed improvements to the drinking water system with a similar prioritization as CSO control projects.

There are four primary areas of concern with Lowell's drinking water distribution system that should be addressed within Lowell's integrated plan: the presence of more than 500 water service pipes with suspected lead material; the existence of several unreliable water transmission lines throughout the city; the absence of a redundant finished water transmission main leaving the treatment facility; and a lack of adequate storage for finished water in the eastern quadrant of the city.

The suspected lead service pipes were installed many decades ago; these lead pipes do not meet today's standards for a public drinking water distribution system. The lead pipes should be replaced with new pipes that are made of modern materials, in order to prevent the leaching of lead into the city's finished drinking water system.

Transmission line vulnerabilities are prevalent throughout the city, particularly associated with several water mains that cross the Merrimack River. The key transmission vulnerability is the lack of redundant water main leaving the drinking water treatment facility. All of the





Eileen M. Donoghue  
City Manager

transmission vulnerabilities create the potential for inadequate water supply for residential and commercial users, as well as fire safety, in the event of a water transmission main break.

In addition to improving the reliability of drinking water transmission throughout the city, there is also a need for increased storage of finished water in the eastern quadrant of the city. Because of the long distance from the water treatment facility, and the absence of any active storage facilities in the area, a transmission main break could jeopardize the flow of finished water to their neighborhood.

These drinking water improvements are included in the integrated capital improvement plan described below. Also included in the capital improvement plan is a necessary upgrade to the drinking water treatment facility. This upgrade will ensure the effective and reliable treatment of raw water from the Merrimack River that is polished into finished drinking water for the city's water users.

The Wastewater portion of the integrated plan features several CSO control projects that will substantially reduce Lowell's discharge of CSOs into local waterways through a combination of conveyance, storage, and treatment strategies for wet-weather flows. In addition to CSO control, the IP includes several satellite pumping station upgrades that are crucial to maintain the reliability of the sewage collection system. Similarly, the Duck Island treatment facility requires improvements that will ensure the proper cleaning of wastewater before discharge into the Merrimack River.

Another priority that is addressed in the IP is the construction of two wet weather storage facilities located in neighborhoods that experience intermittent sewer surcharging. Although infrequent, these surcharge events create unsanitary conditions, with raw sewage flooding into basements and roadways.

Altogether, the capital improvements included in this \$112M integrated plan represent ten years of overall water systems upgrades that will protect the local environment and improve the quality of life for Lowell's residents, businesses, and visitors. With this plan the city will enhance the local environment and improve the health of our community.

Sincerely,

Eileen M. Donoghue  
City Manager

CC: Conor Baldwin, Chief Financial Officer